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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/083,890	02/27/2002	Narayanan Venkitaraman	CM05034H	2114
22917	7590	06/24/2004	EXAMINER	
MOTOROLA, INC. 1303 EAST ALGONQUIN ROAD IL01/3RD SCHAUMBURG, IL 60196			HARPER, KEVIN C	
			ART UNIT	PAPER NUMBER
			2666	7

DATE MAILED: 06/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/083,890

Applicant(s)

VENKITARAMAN ET AL.

Examiner

Kevin C. Harper

Art Unit

2666

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 April 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-12 and 14-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-12 and 14-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Arguments

1. Applicant's arguments filed April 12, 2004, with respect to the rejection of claims 1-2, 4-10 and 14-20 under 35 USC 112 have been fully considered and are persuasive. The rejection of claims 1-2, 4-10 and 14-20 has been withdrawn.
2. Applicant's arguments filed April 12, 2004, concerning the Johnson reference have been fully considered but they are not persuasive. Applicant argued that the Johnson reference is not enabling because it is not possible to determine a care of address for a mobile node. However, the description in Johnson is based on a mobile IP standard (col. 4, line 10 through col. 5, line 15) which describes a mobile node, a care-of-address and a binding cache. Accordingly, the care-of-addresses to determine which port on a router to forward a packet to reach a mobile network node (Figure 1) is enabled and within the skill of one in the art.
3. As noted in the rejection below, Johnson teaches a first entry of a binding cache which maps a home address of a mobile network node to a home address of a mobile router associated with a mobile network and a second entry that maps the home address of the mobile router to a care of address.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-2, 4-10 and 14-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Johnson et al. (US 6,625,135)

4. Regarding claims 1-2, 4 and 14-20, Johnson discloses a method for use in a packet network system comprising a correspondent node and a mobile network node (Figure 1). The correspondent node having an inherent processor sends a packet to the mobile network node causing the correspondent node to receive binding information (col. 16, lines 41-45 and 51-54) which includes a first entry (col. 16, lines 41-45) indicating an association between the mobile network node and a mobile network and a second entry (col. 16, lines 51-54) indicating a proxy address associated with the mobile network. The method comprises storing the entries and using the entries to determine that a packet for a mobile network node is directed to a mobile network reachable by a proxy address (col. 17, lines 4-7 and 10-17). The first entry maps a home address of the mobile network node to a home address of a mobile router (col. 16, lines 41-45; note: the address of the service laptop 76 is mapped to the address of the mobile router 78) and the second entry maps the home address of the mobile router to a care of address (col. 16, lines 51-54; note: the address of the mobile router 78 is mapped to an IP address of an inherent connecting node in the foreign network 82). Further regarding claims 16-20, in Johnson the binding updates are sent to a home agent (col. 16, lines 41-45).

5. Regarding claim 5, the mobile network node is a laptop (Figure 12, item 76; col. 17, lines 19-25).

6. Regarding claims 6-10, in Johnson when the mobile network node detaches from the mobile network and moves to a new location or visited network to become an independent mobile node, the binding cache of the correspondent node is updated indicating an associate between the mobile node and the visited network (col. 6, line 62 through col. 7, line 2) by replacing the first entry with

updated binding information so that the correspondent node upon next attempting to send packets to the mobile node consults the binding cache to determine that packets should be directed to the visited network (col. 7, lines 29-31; col. 16, lines 21-25) and the proxy address of the mobile network node is similarly updated when the mobile network moves to a new location or network (col. 16, lines 19-21; col. 17, lines 42-45).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 11-12 and 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson et al. (US 6,625,135) in view of Malki et al. (US 2001/0046223).

7. Regarding claims 11 and 21-23, Johnson discloses a correspondent node (Figure 12, item 80) receiving a first address identifier and a second identifier (col. 16, lines 41-45 and 51-54). The method of Johnson comprises forming a routing header using the first identifier and a home address of the mobile network node (col. 16, lines 25-27 and col. 17, lines 21-26; note: the first identifier is the address of the mobile router 78 which is used to encapsulate a packet addressed to the laptop 76). The method also comprises appending the routing header to a packet header having a second identifier as a destination address (col. 17, lines 15-17) and inherently the source address of the

correspondent node (col. 17, lines 4-27-28). However, Johnson does not disclose receiving the first identifier from a mobile network node and a second identifier from a mobile router. Malki discloses transmitting binding updates from a device to a correspondent node (para. 50, last nine lines; Figure 10, step 1040). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to have a mobile network node and a mobile router send identifiers (binding updates) directly to a correspondent node in the invention of Johnson in order to optimize the routing of the packets or to maintain an optimized routing as the mobile network node or mobile router changes its accessibility throughout a network.

8. Regarding claim 12, in Johnson the binding cache of the correspondent node is updated when the mobile network node moves to a new location or network (col. 6, line 62 through col. 7, line 2; col. 7, lines 29-31; col. 16, lines 21-25) and the proxy address of the mobile network node is updated when the mobile network moves to a new location or network (col. 16, lines 19-21; col. 17, lines 42-45). Accordingly, the correspondent node appends a third address identifier to the routing header indicating the new proxy address.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the

Art Unit: 2666

date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Harper whose telephone number is 703-305-0139. The examiner can normally be reached weekdays from 11:30 AM to 8:00 PM ET.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema S. Rao, can be reached at 703-308-5463. The centralized fax number for the Patent Office is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only (applications must be associated with a customer number). For more information about the PAIR system, see pair.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kevin C. Harper



June 20, 2004

Seema S. Rao
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